

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

EX PARTE OLIVER

U.S. PATENT APPLICATION NUMBER 12/070,164

FILING DATE: FEBRUARY 15, 2008

BRIEF ON APPEAL

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REAL-PARTY-IN-INTEREST
(37 C.F.R. § 41.37(c)(1)(i))

The Appellants in the present appeal are Jonathan J. Oliver and David A. Koblas, the named inventors in U.S. patent application 12/070,164 (the '164 Application). The real-party-in-interest is SonicWALL, Inc. An assignment by and between the Appellants and MailFrontier, Inc. is recorded at Reel 020589 and Frame 0787. An assignment from MailFrontier, Inc. to SonicWALL, Inc. is recorded at Reel 020589 and Frame 0793. A merger between SonicWALL, Inc. and PSM Merger Sub, Inc. is recorded at Reel 024755 and Frame 0083. A name change from PSM Merger Sub, Inc. to SonicWALL, Inc. is recorded at Reel 024755 and Frame 0091.

RELATED APPEALS AND INTERFERENCES
(37 C.F.R. § 41.37(c)(1)(ii))

The '164 Application is a divisional and claims the priority benefit of U.S. patent application 10/776,677 filed February 10, 2004, which is not currently involved in any appeal or interference proceeding before the Board of Patent Appeals and Interferences.

STATUS OF THE CLAIMS
(37 C.F.R. § 41.37(c)(1)(iii))

Claims 1-10 and 12-21 are pending and under appeal. Claim 11 has been cancelled. All of the aforementioned claims have been twice rejected. No claims have been allowed or are otherwise objected to by the Examiner.

STATUS OF AMENDMENTS
(37 C.F.R. § 41.37(c)(1)(iv))

Counsel for the Appellants filed the '164 Application on February 15, 2008. The filed application included 1 independent claim.

The Examiner issued a non-final office action dated November 24, 2008. The Appellants submitted an amendment on March 3, 2009 with respect to claim 1 and added new claims 2-17.

A final action dated May 28, 2009 rejected claims 1-17. *May 28, 2009 Final Office Action*, 2-7. The Appellants filed an amendment with a request for continued examination on August 28, 2009 with respect to claims 1, 2, 9, and 10, while adding new claims 18-21 and cancelling claim 11.

The Examiner issued a non-final action dated November 10, 2009 "[r]esponsive to communication(s) filed on 28 August 2009." *November 10, 2009 Office Action*, 1. The Appellants thereafter filed a notice of appeal on May 10, 2010.

SUMMARY OF THE CLAIMED SUBJECT MATTER
(37 C.F.R. § 41.37(c)(1)(v))¹

Independent claim 1 as presented for appeal recites:

1. A computer-readable storage medium having embodied thereon a program, the program being executable by a computer to perform a method of determining a boundary IP address, the method comprising:
 - processing the header of an electronic-mail message to extract a plurality of candidate IP addresses and corresponding domains;
 - storing each extracted domain and IP address in an array;
 - locating a gateway IP address from the extracted candidate IP addresses stored in the array;
 - selecting the boundary IP address;
 - looking up the boundary IP address and corresponding domain in a reputation table, wherein the presence of the boundary IP address and corresponding domain in the reputation table is included in a classification of the electronic mail-message, the reputation table including a decaying classification variable that reduces the effect of an older classification; and
 - classifying the electronic-mail message.

“The invention can be implemented in numerous ways, including ... a computer readable medium such as a computer readable storage medium.” *Specification*, 4:1-3.
 “[T]he header is first processed to extract the IP addresses and domains.” *Specification*, 8:5-6. “The top level domain and IP addresses (in brackets) can be extracted from each ‘Received: from’ line and placed in an array.” *Specification*, 8:6-7. “The gateway IP address is then located. *Specification*, 8:17. “Any appropriate method for finding a known value within an array may be used.” *Specification*, 8:19-20. “The boundary IP address is then selected based on the location of the gateway IP address.” *Specification*, 8:21-22.

¹ All references to the *SPECIFICATION* are exemplary and are not intended to be limiting. The present references are made solely to satisfy the requirements of 37 C.F.R. § 41.37(c)(1)(v). No reference is intended—nor should it be construed—as an admission or denial as to any requirement for patentability, including but not limited to those requirements set forth in 35 U.S.C. § 112, ¶ 1 as they pertain to written description and enablement.

"Once an appropriate IP address and domain are selected, they can be looked up in a reputation table." *Specification*, 9:8-9. "The reputation table includes information about previous classifications made to various IP address and domain pairs." *Specification*, 9:10-11. The reputation table includes cells wherein "[e]ach cell is indexed by a domain and an IP address. Each cell stores information that can be used to make a determination about messages associated with that IP address and domain pair." *Specification*, 9:13-15. "In some embodiments, information is stored in the form of classification variables." *Specification*, 9:15-16. "[C]lassification variables are decayed over time to reduce the effects of older classifications." *Specification*, 10:24-25. "Decaying the classification variables can be performed in various ways" such as by "linear or exponential decay." *Specification*, 10:27 – 11:1-2. "[O]nce an appropriate IP address and domain are selected and they are accessed in a reputation table, the message is classified based on the IP address and domain pair." *Specification*, 11:3-5.

GROUND OF REJECTION TO BE REVIEWED ON APPEAL
(37 C.F.R. § 41.37(C)(1)(vi))

- I. Are claims 1-10 and 12-17 indefinite under 35 U.S.C. § 112, ¶ 2 for lacking proper antecedent basis?
- II. Has the Examiner Evidenced a *Prima Facie* Case of Obviousness for claims 1-10 and 12-17 with Respect to *Kirsch*, *Banes*, and *Kissel*?
 - A. Do *Kirsch*, *Banes*, and *Kissel* teach all of the claim limitations?
 - B. Has the Examiner established a motivation to combine *Kirsch*, *Banes*, and *Kissel*?

ARGUMENT
(37 C.F.R. § 41.37(c)(1)(vii))

I. Claims 1-10 and 12-17 do not lack proper antecedent basis under 35 U.S.C. § 112, ¶ 2.

The Examiner maintains his rejection of claims 1-10 and 12-17 under 35 U.S.C. § 112 ¶ 2 as being indefinite for lacking proper antecedent basis. See *November 10, 2009 Office Action*, 2. Specifically, the Examiner asserts that the following terms lack proper antecedent basis: ‘the header’ (claim 1), ‘the presence of the boundary IP address’ (claim 1), ‘the effect of an older classification’ (claim 1), and ‘the same domain’ (claim 10).

The Appellants contend that the terms ‘the header,’ ‘the presence of the boundary IP address,’ and ‘the effect of an older classification’ of claim 1, and ‘the same domain’ of claim 10, do **not** lack antecedent basis and, further, are **not indefinite** under 35 U.S.C. 112, ¶ 2. As an initial matter, the Appellants note that **“the failure to provide explicit antecedent basis for terms does not always render a claim indefinite”** under 35 U.S.C. 112, ¶ 2. *Energizer Holdings Inc. v. Int’l Trade Comm’n*, 435 F.3d 1366, 1370 (Fed. Cir. 2006) (emphasis added); see also *Manual of Patent Examining Procedure (MPEP)* § 2173.05(e).

The Examiner “should allow claims which define the patentable subject matter with a reasonable degree of particularity and distinctness. Some latitude in the manner of expression and the aptness of terms should be permitted even though the claim language is not as precise as the examiner might desire.” MPEP § 2173.02 (emphasis in original). Under 35 U.S.C. § 112, ¶ 2, the essential inquiry is “whether the claims set out and circumscribe a particular subject matter with a reasonable degree of clarity and particularity.” *Solomon v. Kimberly-Clark Corp.*, 16 F.3d 1372, 1379 (Fed. Cir. 2000). The test for definiteness under 35 U.S.C. § 112, ¶ 2 is “whether ‘those skilled in the art would understand what is claimed when the claim is read in light of the specification.’” *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576 (Fed. Cir. 1986). It is “[o]nly when a claim remains **insolubly ambiguous without a discernible meaning**

after all reasonable attempts at construction must a court declare it indefinite.”

Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings, 370 F.3d 1354, 1366 (Fed. Cir. 2004)

(emphasis added); see also MPEP § 2173.02.

In this context, the Appellants note that the Examiner does not provide any other basis for the Section 112 rejection other than lack of antecedent basis. The Appellants contend that those skilled in the art would understand the meaning of the terms ‘the header,’ ‘the presence of the boundary IP address,’ and ‘the effect of an older classification’ of claim 1 in light of the specification. Electronic-mail messages, like those recited in claim 1, are generally understood to include a header. For example, the specification of the present application notes that ‘[a] typical message header includes an IP address and domain for each hop along the path the message took between the sender and the recipient.’ *Specification*, 7:1-3. Thus, where a reference is made to ‘the header’ of an electronic-mail message, a person having ordinary skill in the art would understand ‘the header’ to be that *inherent* information preceding the text of the electronic-mail message. Inherent components of elements recited in a claim have antecedent basis in the recitation of the components themselves. See *Bose Corp. v. JBL, Inc.*, 274 F.3d 1354 (Fed. Cir. 2001). Because ‘the header’ has meaning and is clear, the fact that ‘the header’ is not preceded by ‘a header’ does not make the claim indefinite.

Similarly, references to ‘the presence of the boundary IP address’ and ‘the effect of an older classification’ in claim 1 are not indefinite. The ‘164 Application recites, at least, ‘[t]ypically, the boundary IP address is the IP address one hop below the gateway IP address in the chain of IP addresses shown in the header.’ *Specification*, 7:9-10. With respect to ‘the effect of an older classification,’ the ‘164 Application recites, in part, ‘[t]he classification variables are decayed over time to reduce the effects of older classifications’ as ‘[o]lder classifications may be considered less reliable due to changes that may occur over time.’ *Specification*, 10:24-26. The “essential inquiry” pertaining to 35 U.S.C. § 112, ¶ 2 “is whether the claim meets the threshold requirements of clarity

and precision, **not** whether more suitable language or modes of expression are available.” MPEP § 2173.02. As such, a person having ordinary skill in the art would understand the meaning of the terms ‘the presence of the boundary IP address’ and ‘the effect of an older classification’ of claim 1 in light of the specification with a reasonable degree of clarity and particularity. As the terms ‘the presence of the boundary IP address’ and ‘the effect of an older classification’ are reasonably ascertainable by a person having ordinary skill in the art such that the claim is not rendered “insolubly ambiguous,” the terms are not indefinite.

The Examiner also contends that the term ‘the same domain’ of claim 10 is indefinite. With respect to claim 10, the Appellants seek to claim, *inter alia*, that reverse domain analysis indicates that the analyzed domain is **the same** domain. ‘Reverse domain information’ ‘can be used to determine the boundary IP address of an email message.’ *Specification*, 8:26-28. When reverse domain analysis ‘indicates that the domain is the same, then the domain and associated IP address can be considered trusted.’ *Specification*, 9:1-2. The Appellants respectfully contend that the Examiner has read the claim terminology ‘the same’ in a vacuum and without the benefit of the context of the remainder of the claim. Proper examination demands consideration of the claim as a whole, rather than an isolated part. See *Phillips v. AWH Corporation*, 415 F.3d 1303, 1313 (Fed. Cir. 2005). When read in context (*i.e.*, determining that a domain is ‘the same domain’ by way of ‘analysis of the reverse domain information’), the ‘same domain’ of claim 10 has meaning and is clear. As such, there is no indefinite aspect of claim 10.

As the terms ‘the header,’ ‘the presence of the boundary IP address,’ and ‘the effect of an older classification’ of claim 1, and the ‘the same domain’ of claim 10, do **not** lack antecedent basis and are **not indefinite** under 35 U.S.C. 112, ¶ 2, the Appellants respectfully request that the Section 112 rejection be withdrawn.

II. The Examiner has Not Evidenced a *Prima Facie* Case of Obviousness for claims 1-10 and 12-17 with Respect to *Kirsch, Banes, and Kissel*.

The Examiner maintains his rejection of independent claim 1 under 35 U.S.C. § 103 as being unpatentable over U.S. patent publication number 2004/0177120 (hereinafter *Kirsch*) in view of U.S. patent publication number 2004/0117648 (hereinafter *Kissel*) and U.S. patent publication number 2005/0038906 (hereinafter *Banes*). See *November 10, 2009 Office Action*, 3.

A. *Kirsch, Banes, and Kissel – Individually or Collectively - Fail to Disclose all Claim Limitations*

The Appellants submit that *Kirsch, Banes, and Kissel* fail – individually or in combination – to teach or suggest all the elements of independent claim 1, including at least ‘looking up the boundary IP address and corresponding domain in a reputation table, wherein the presence of the boundary IP address and corresponding a domain in the reputation table is included in a classification of the electronic mail message, the reputation table including a decaying classification variable that reduces the effect of an older classification.’

To support a conclusion that the claim would have been obvious requires that **all** the claimed elements were known in the prior art and that one skilled in the art would have combined those elements. See *KSR v. Teleflex*, 550 U.S. 398, 418 (2007); see also MPEP § 2143. The Examiner admits that *Kirsch* does not disclose the claimed ‘decaying classification variable’ and relies solely on *Kissel* for teaching the same. See *November 10, 2009 Office Action*, 4. The Appellants respectfully contend that such reliance is misplaced.

The ‘decaying classification variable’ of the ‘164 Application represents ‘**information about previous classifications made to various IP address and domain pairs.**’

Specification, 9:10-11. ‘In some embodiments, information is stored in the form of

classification variables’ which ‘could include a count of previous classifications made to the IP address and domain pair.’ *Specification*, 9:15-18. ‘[T]he classification variables are decayed over time to reduce the effects of older classifications’ since ‘[o]lder classifications may be considered less reliable due to changes that may occur over time.’ *Specification*, 10:24-26.

The Appellants further submit that the claim language of independent claim 1 must be read as a whole, in context, and consistently with the specification. Proper examination demands consideration of the claim as a whole, rather than an isolated part. See *Phillips v. AWH Corporation*, 415 F.3d 1303, 1313 (Fed. Cir. 2005); see also *ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1088 (Fed. Cir. 2003) (“the context of the surrounding words of the claim also must be considered in determining the ordinary and customary meaning of those terms”). As such, consideration must be given to the explicit recitation that the ‘decaying classification variable’ is included in ‘the reputation table’ and reduces the effect of older classifications based on ‘boundary IP address and corresponding domain.’ See e.g., *Claims Appendix*, claim 1.

Kissel fails to teach the claimed ‘decaying classification variable,’ because a “score” under the teachings of *Kissel* is not associated with a reputation table of classifications based on IP address and corresponding domain pair as claimed. Instead, *Kissel*’s “score” is based on “[a] number T of entries in table 7 in the current time window Q,” “a decaying weight value R **representing recently removed entries** from Table 7,” and “a ‘memory’ decaying weighted value P **of all previously calculated score(s)** S.” *Kissel*, [0069] - [0071].

Mere reference to decay in *Kissel* fails to teach the specifically claimed ‘reduc[ti]on of] the effect of an older classification’ that is based on ‘boundary IP address and corresponding domain.’ Rather, decay in *Kissel* relates to the “score” which is based on “[a] number T of entries in table 7, “[a] decaying weighted value R representing recently removed

entries from Table 7,” and “a ‘memory’ decaying weighted value P of all previously calculated score(s) S.” *Kissel*, [0069] - [0071]. *Kissel* is completely silent about ‘reduc[ing] the effect of an older classification’ based on ‘boundary IP address and corresponding domain.’ In failing to teach any ‘boundary IP address’ (or ‘corresponding domain’), *Kissel* thereby fails to teach any classification based on boundary IP address (or domain) or that decay applies to the same. Such an interpretation is further supported by the context of the present specification. As *Kissel* fails to disclose the claimed ‘decayed classification variable,’ the Appellants respectfully request that the Section 103 rejection be withdrawn.

The addition of *Banes*— individually or in combination — does not remedy the failure of *Kissel* and *Kirsch* to teach or suggest each element of claim 1.

A *prima facie* case of obviousness may only be established where the Examiner has articulated a finding that **all** the claimed elements were known in the prior art. See *KSR v. Teleflex*, 550 U.S. 398, 418 (2007); see also MPEP § 2143. (emphasis added). *Kirsch*, *Kissel*, or *Banes* — individually or in any combination — fail to teach all claim limitations as recited in claim 1. As such, the Appellants respectfully request that the Section 103 rejection be withdrawn.

B. The Examiner Has Not Established a Motivation to Combine

The Examiner fails to provide a proper motivation to combine the cited references. The Examiner contends that “[i]t would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of *Kirsch* and *Kissel* because *Kissel*’s teaching of decaying classification variable would **improve the classification of *Kirsch*’s system by providing a function that weight [sic] variable that depends on time.**” *November 10, 2009 Office Action*, 4. (emphasis added).

The Examiner's conclusory statements are **not sufficient** to establish a *prima facie* case of obviousness without some objective **reason to combine** the teachings of the references. See *Ex parte Levengood*, 28 USPQ.2d 1300 (Bd. Pat. App. & Inter. 1993). The U.S. Supreme Court re-affirmed the same in *KSR International Co. v. Teleflex Inc.* wherein the Court found that "rejections on obviousness cannot be sustained by **mere conclusory statements**; instead, there must be some articulated **reasoning** with some rational underpinning to support the legal conclusion of obviousness." *KSR v. Teleflex*, 550 U.S. 398, 418 (2007) (emphasis added); see also MPEP § 2143

Here, the Examiner fails to explain —as least with respect to the bar of a *prima facie* case of obviousness— **why** the teachings of *Kissel* and *Kirsch*, in particular, could or should be combined. The Examiner states only that "*Kissel's* teaching of decaying classification variable would improve the classification of *Kirsch's* system by providing a function that weight variable that depends on time." Such a conclusory statement does not explain why or how the addition of *Kissel's* "function that weight variable that depends on time" would improve *Kirsch's* classification. The purported motivation fails to explain why a person of ordinary skill in the art would specifically combine *Kirsch* with *Kissel* in the particular manner so as to teach the claimed invention. Mere assertion that *Kissel improves Kirsch's* system does not establish a *prima facie* case of obviousness.

The Examiner alternatively appears to assert obviousness based on "applying a known technique to a known device (method, or product) ready for improvement to yield predictable results." See MPEP § 2143 (D). To properly reject a claim based on this rationale, the Examiner must "resolve the *Graham* factual inquiries" and articulate the following:

- (1) a finding that the prior art contained a "base" device (method, or product) upon which the claimed invention can be seen as an "improvement;
- (2) a finding that the prior art contained a known technique that is applicable to the base device (method, or product);

- (3) a finding that one of ordinary skill in the art would have recognized that applying the known technique would have yielded predictable results and resulted in an improved system; and
- (4) whatever additional findings based on the *Graham* factual inquiries may be necessary, in view of the facts of the case under consideration, to explain a conclusion of obviousness.

See MPEP § 2143 (D).

The Examiner, however, neither resolved the *Graham* factual inquiries nor articulated any of the requisite findings above. **“If any of these findings cannot be made, then this rationale cannot be used to support a conclusion that the claim would have been obvious to one of ordinary skill in the art.”** See MPEP § 2143 (D).

As such, the Examiner has failed to evidence a proper motivation to combine, as required to establish a *prima facie* case of obviousness, and Appellants respectfully request withdrawal of the Section 103 rejection.

CONCLUSION AND REQUESTED RELIEF

The Appellants have demonstrated that the claims do not lack antecedent basis and are not indefinite under 35 U.S.C. 112, ¶ 2. Specifically, claim terminology of claims 1 and 10 are reasonably ascertainable by a person having ordinary skill in the art such that the claims are not rendered “insolubly ambiguous.” The Appellants have also evidenced the lack of a prima facie case of obviousness under 35 U.S.C. § 103, because *Kirsch*, *Banes*, and *Kissel* -- individually and collectively -- fail to teach each and every claim limitation of the independent claims, including at least the claimed ‘looking up the boundary IP address and corresponding domain in a reputation table, wherein the presence of the boundary IP address and corresponding a domain in the reputation table is included in a classification of the electronic mail message, the reputation table including a decaying classification variable that reduces the effect of an older classification.’ In addition, the Section 103 rejection fails for lack of a motivation to combine. Any claim dependent upon the aforementioned independent claims --either directly or via an intermediate dependent claim-- is allowable for at least the same reasons as the independent claim from which it depends. As such, each and every one of the dependent claims of the present application are also in condition for allowance. For at least these reasons, the Examiner’s rejections should be withdrawn.

Respectfully submitted,
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CLAIMS APPENDIX
(37 C.F.R. § 41.37(c)(1)(viii))

1. A computer-readable storage medium having embodied thereon a program, the program being executable by a computer to perform a method of determining a boundary IP address, the method comprising:
 - processing the header of an electronic-mail message to extract a plurality of candidate IP addresses and corresponding domains;
 - storing each extracted domain and IP address in an array;
 - locating a gateway IP address from the extracted candidate IP addresses stored in the array;
 - selecting the boundary IP address;
 - looking up the boundary IP address and corresponding domain in a reputation table, wherein the presence of the boundary IP address and corresponding domain in the reputation table is included in a classification of the electronic mail-message, the reputation table including a decaying classification variable that reduces the effect of an older classification; and
 - classifying the electronic-mail message.
2. The computer-readable storage medium of claim 1, wherein the domain and IP address are extracted from each 'received: from' line in the electronic-mail message header.
3. The computer-readable storage medium of claim 1, wherein the gateway IP address is a known IP address within a trusted user network.
4. The computer-readable storage medium of claim 1, wherein the gateway IP address is located by marching down the array.
5. The computer-readable storage medium of claim 4, wherein a comparison is performed at each step of marching down the array.
6. The computer-readable storage medium of claim 1, wherein the boundary IP address is selected based on the location of the gateway IP address.
7. The computer-readable storage medium of claim 6, wherein the boundary IP address is the IP address located after the gateway IP address.
8. The computer-readable storage medium of claim 6, wherein the boundary IP address is the IP address located last in the header of the electronic-mail message.
9. The computer-readable storage medium of claim 1, the method further comprising analyzing reverse domain information, wherein the results of the reverse domain analysis is also included in the classification of the electronic-mail message.

10. The computer-readable storage medium of claim 9, wherein analysis of the reverse domain information includes verifying that the domain is the same domain, the verification reflecting that the domain and associated IP address are trusted.
12. The computer-readable storage medium of claim 1, wherein the classification of the electronic-mail message is that the electronic-mail message involves spoofing of sender information.
13. The computer-readable storage medium of claim 1, wherein the classification of the electronic-mail message is that the message is spam.
14. The computer-readable storage medium of claim 1, wherein the classification of the electronic-mail message is that the message is not spam.
15. The computer-readable storage medium of claim 1, wherein the classification of the electronic-mail message is that the message is likely spam.
16. The computer-readable storage medium of claim 1, the method further comprising overriding a white list based on the classification of the electronic-mail message.
17. The computer-readable storage medium of claim 1, the method further comprising overriding a black list based on the classification of the electronic-mail message.
18. The computer-readable storage medium of claim 1, wherein decay of the classification variable is linear.
19. The computer-readable storage medium of claim 1, wherein decay of the classification variable is exponential.
20. The computer-readable storage medium of claim 1, wherein decay of the classification variable occurs periodically.
21. The computer-readable storage medium of claim 1, wherein decay of the classification variable occurs immediately prior to incrementing the variable.

EVIDENCE APPENDIX
37 C.F.R. § 41.37(c)(1)(ix)

Not applicable in the present appeal.

RELATED PROCEEDINGS APPENDIX

37 C.F.R. § 41.37(c)(1)(x)

Not applicable in the present appeal.

UNITED STATES PATENT AND TRADEMARK OFFICE

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ARGUMENT
(37 C.F.R. § 41.37(c)(1)(vii))

I. Claims 1-10 and 12-17 do not lack proper antecedent basis under 35 U.S.C. § 112, ¶ 2.

In the Brief on Appeal filed August 16, 2010 (*Appeal Brief*), the Appellants contended that the terms ‘the header,’ ‘the presence of the boundary IP address,’ and ‘the effect of an older classification’ of claim 1, and ‘the same domain’ of claim 10, are **not indefinite** under 35 U.S.C. 112, ¶ 2. See *Appeal Brief*, 8-10.

In response, the Examiner cites MPEP § 2173.05(e), which states that “lack of clarity **could** arise where a claim refers to ‘said lever’ or ‘the lever,’ where the claim contains no earlier recitation or limitation of a lever **and where it would be unclear** as to what element the limitation was making reference.” *Examiner’s Answer*, 11-12 (emphasis added). The Examiner still relies solely, however, on the fact that “[i]n this instance, the claim terms . . . have no earlier recitation or limitation.” *Examiner’s Answer*, 12. No other evidence is provided to support the assertion that the claim limitations ‘would be unclear as to what element the limitation was making reference.’

The Examiner fails entirely, for example, to address the MPEP’s admonition that “the failure to provide explicit antecedent basis for terms **does not always render a claim indefinite**” under 35 U.S.C. 112, ¶ 2. MPEP § 2173.05(e) (relying on *Energizer Holdings Inc. v. Int’l Trade Comm’n*, 435 F.3d 1366, 1370 (Fed. Cir. 2006)) (emphasis added). The Examiner also fails to address the Federal Circuit’s contention that “[i]nherent components of elements recited have antecedent basis in the recitation of the components themselves.” *Bose Corp. v. JBL, Inc.*, 274 F.3d 1354, 1359 (Fed. Cir 2001) (finding that the limitation “the outer surface of said sphere” **would not require an antecedent recitation** that the sphere has an outer surface). Similarly, a limitation regarding ‘the header’ of an email would not require an antecedent recitation that the

email has a header. Because ‘the header’ of an email message has meaning and is clear to a person having ordinary skill in the art, the fact that ‘the header’ is not preceded by ‘a header’ does not make a claim indefinite. For similar reasons, references to ‘the presence of the boundary IP address’ and ‘the effect of an older classification’ in claim 1 are not indefinite.

It is “[o]nly when a claim remains **insolubly ambiguous without a discernible meaning** after all reasonable attempts at construction must a court declare it indefinite.” *Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings*, 370 F.3d 1354, 1366 (Fed. Cir. 2004) (emphasis added). Because mere lack of antecedent recitation is not a sufficient basis for a finding of indefiniteness and because insoluble ambiguity has not been established, the Appellants respectfully request that the Section 112 rejection be withdrawn.

II. The Examiner has Not Evidenced a *Prima Facie* Case of Obviousness for claims 1-10 and 12-17 with Respect to *Kirsch, Banes, and Kissel*.

A. *The Cited References Do Not Disclose the Claimed ‘Decaying Classification Variable’*

In the *Appeal Brief*, the Appellants argued that “consideration must be given to the explicit recitation that the ‘decaying classification variable’ is included in ‘the reputation table’ and reduces the effect of older classifications based on ‘boundary IP address and corresponding domain.’” *Appeal Brief*, 12. In response to the *Appeal Brief*, the Examiner argues that “the features upon which applicant relies (i.e., reduces the effect of older classifications based on boundary IP address and corresponding domain) are not recited in the rejected claims.” *Examiner’s Answer*, 13.

The Appellants respectfully disagree and refer the Examiner to the following claim limitation recited in claim 1, which is generally representative of the claims in issue:

looking up the boundary IP address and corresponding domain in a reputation table, wherein the presence of the **boundary IP address and corresponding domain** in the reputation table is included in a **classification** of the electronic mail-message, the reputation table including a **decaying classification** variable that reduces the effect of an **older classification**

Claim 1 recites a reputation table in which classifications of email explicitly include boundary IP address and corresponding domain. As such, reference to a particular classification in the reputation table (*e.g.*, ‘an older classification’) must be read in the context of the claim reciting that ‘the presence of the **boundary IP address and corresponding domain** in the reputation table is included in a **classification** of the electronic mail-message.’ The Appellants submit that it is unreasonable for the Examiner to exclude consideration of such explicitly recited claim elements with respect to the claimed ‘older classification.’ The claimed ‘older classification’ is still ‘a classification of the electronic-mail message’ in the reputation table, despite being ‘older.’ As such, the claimed ‘older classification’ is subject to the same limitations recited regarding such classification of email messages.

The interpretation presented by Appellants is, further, consistent with the specification. See *e.g.*, *Specification*, 9:10-11 (disclosing that the “reputation table includes information about **previous** classifications made to various IP address and domain pairs”). The Appellants are not reading a limitation from the specification into the claims; rather, the Appellants merely point out that the **explicitly recited** claim limitations must be interpreted in a manner consistent with the specification, as required by MPEP § 2111. (stating that “pending claims must be ‘given their broadest reasonable interpretation consistent with the specification’”); see also *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005) (specifying that “claims **must ‘conform to the invention as set forth in**

the remainder of the specification”). The interpretation proffered by the Examiner is not reasonable and not consistent with the specification.

In addition, the only reference cited by the Examiner as teaching the claimed ‘decaying’ is *Kissel*. *Kissel*, however, fails to teach the claimed ‘decaying classification variable,’ because *Kissel*’s “decay” is not applied to an older classification of email that is based on boundary IP and domain, as claimed. In addition, *Kissel*’s score is not included in a reputation table of email classifications based on IP address and corresponding domain pair, as claimed. Instead, *Kissel* teaches a “score” that is based on “[a] number T of entries in table 7 in the current time window Q,” “a decaying weight value R representing recently removed entries from Table 7,” and “a ‘memory’ decaying weighted value P of all previously calculated score(s) S.” *Kissel*, [0069] - [0071]. None of the foregoing is an older classification of email including boundary IP and corresponding domain.

Mere reference to decay in *Kissel* cannot teach the specifically claimed ‘reduc[tion of] the effect of an older classification’ that is based on ‘boundary IP address and corresponding domain.’ Combining *Kissel* with *Kirsch* and/or *Banes*—individually or in combination—is therefore insufficient to teach or suggest the specifically claimed ‘decaying classification variable that reduces the effect of an older classification’ recited in claim 1.

A *prima facie* case of obviousness may only be established where the Examiner has articulated a finding that all the claimed elements were known in the prior art. See *KSR v. Teleflex*, 550 U.S. 398, 418 (2007); see also MPEP § 2143. (emphasis added). *Kirsch*, *Kissel*, or *Banes*—individually or in any combination—fail to teach all claim limitations as recited in claim 1. As such, the Appellants respectfully request that the Section 103 rejection be withdrawn.

B. *The Examiner Has Not Established a Motivation to Combine*

The Examiner argues that it would have been obvious “to use *Kissel*’s technique of decaying variable to improve similar email classification method of *Kirsch* in the same way.” *Examiner’s Answer*, 14. The Examiner fails to consider, however, that the *Kirsch* already teaches addressing older classifications via “receiv[ing] updates about e-mail messages and true senders sent at intervals.” *Kirsch*, [0024]. There is no need to decay older classifications in a system that is being updated “on a regular basis.” *Id.* In contrast, the only way for *Kissel*’s scores to be updated is to decay in order to account for “recently removed entries” and to decay “previously calculated score(s).” *Kissel*, [0070]-[0071].

A person having ordinary skill in the art would therefore have no motivation to combine *Kissel* with *Kirsch*, since *Kirsch* alone already addresses older information through regular updates. Since *Kirsch* already deals with the problem of older information, the Examiner is unable to point to any way for the decay function of *Kissel* “to improve the detection and classification of email” in *Kirsch*. *Examiner’s Answer*, 14.

As such, the Examiner has failed to evidence a proper motivation to combine, as required to establish a *prima facie* case of obviousness, and Appellants respectfully request withdrawal of the Section 103 rejection.

CONCLUSION AND REQUESTED RELIEF

The Examiner fails to establish that the claim terminology is “insolubly ambiguous” so as to merit a rejection for indefiniteness under 35 U.S.C. 112, ¶ 2. The Appellants have also evidenced the lack of a prima facie case of obviousness under 35 U.S.C. § 103, because *Kirsch*, *Banes*, and *Kissel* -- individually and collectively -- fail to teach each and every claim limitation of the independent claims. In addition, the Section 103 rejection fails for lack of a motivation to combine.

Any claim dependent upon the aforementioned independent claims --either directly or via an intermediate dependent claim--is allowable for at least the same reasons as the independent claim from which it depends. As such, each and every one of the dependent claims of the present application are also in condition for allowance. For at least these reasons, the Examiner’s rejections should be withdrawn.

Respectfully submitted,
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